

AMENDMENTS TO THE CLAIMS

Claims 1-5 (Cancelled).

6. (New) A look-ahead stack management system for configuring a look-ahead state of an operand stack in a computer system capable of out-of-order execution, comprising:

a data storing means having entries each being able to hold data; and

a look-ahead mapping means having entries each being able to hold an entry address in said data storing means, wherein:

each time a modification is to be made on said operand stack, said look-ahead mapping means is so managed that, for each entry of said look-ahead mapping means that is to hold an entry address in said data storing means allocated to an operand stack element, the address of the entry of said look-ahead mapping means is to indicate the number of operand stack elements over said operand stack element.

7. (New) A look-ahead stack management system for configuring a look-ahead state of an operand stack in a computer system capable of out-of-order execution, comprising:

a data storing means having entries each being able to hold data; and

a look-ahead mapping means having entries each being able to hold an entry address in said data storing means, wherein:

each time a modification is to be made on said operand stack, said look-ahead mapping means is so managed that, for each entry of said look-ahead mapping means holding an entry address in said data storing means allocated to an operand stack element, if the entry of said look-

ahead mapping means is to hold an entry address in said data storing means allocated to an operand stack element, the number of operand stack elements over the operand stack element whose value is held / to be held in the entry of said data storing means indicated by the address held in the entry of said look-ahead mapping means is to be unchanged.

8. (New) A look-ahead stack management system for configuring a look-ahead state of an operand stack in a computer system capable of out-of-order execution, comprising:

a data storing means having registers each being able to hold data; and

a look-ahead mapping means having registers each being able to hold a register number in said data storing means, wherein:

each time a modification is to be made on said operand stack, said look-ahead mapping means is so managed that, for each register of said look-ahead mapping means that is to hold a register number in said data storing means allocated to an operand stack element, the number of the register of said look-ahead mapping means is to indicate the number of operand stack elements over said operand stack element.

9. (New) A look-ahead stack management system for configuring a look-ahead state of an operand stack in a computer system capable of out-of-order execution, comprising:

a data storing means having registers each being able to hold data; and

a look-ahead mapping means having registers each being able to hold a register number in said data storing means, wherein:

each time a modification is to be made on said operand stack, said look-ahead mapping means is so managed that, for each register of said

look-ahead mapping means holding a register number in said data storing means allocated to an operand stack element, if the register of said look-ahead mapping means is to hold a register number in said data storing means allocated to an operand stack element, the number of operand stack elements over the operand stack element whose value is held / to be held in the register of said data storing means indicated by the number held in the register of said look-ahead mapping means is to be unchanged.